

AMENDMENTS TO THE CLAIMS

- At time of the Action: Claims 1-5, 7-13, and 15-34
- Amended Claims: Claims 1, 9, 16, 23, and 30
- After this Response: Claims 1-5, 7-13, and 15-34

The following listing of claims replaces all prior versions and listings of claims in the application.

1. **(Currently Amended)** An out-of-band method implemented on a computing device having instructions executable by a processor for asynchronously establishing a secure association with a server node, the method comprising:

generating a local public value and a local private value on a client node;

in response to an attempt to remotely load an operating system by the client node, wherein a profile of the operating system is stored on the server node; or

simultaneously with a generation of the local public value and the local private value on the server node;

allowing a client node to exchange information for remotely loading an operating system from one node to another node;

loading the operating system on the client node, ~~wherein a profile of the operating system is stored on the server node;~~

~~generating a local public value and a local private value on the client node;~~

storing the public value for configuration of the secure association on an out-of-band computer-readable storage medium, wherein the stored public value is not used for authentication;

transporting the out-of-band computer-readable storage medium to the server node to establish a trust relationship allowing for remotely loading the operating system on the client node from the server node, wherein a low level of trust is required as the trust relationship required between the client node and the server node is established by using a third party out-of-band entity;

receiving from the server node a public value generated by the server node via the out-of-band computer-readable storage medium, wherein the public value generated by the server node is generated with a private value generated by the server node in response to receiving the public value from the client node;[[and]]

generating a secret value using the local private value in combination with the public value received from the server node; wherein the receiving is asynchronous to the generating the secret value[[]]; and

producing the secret value as a function of a local private value; and

sharing the secret value by encrypting the secret value using an imported public key value, the public key value imported via the out-of-band mechanism.

2. (Original) A method according to Claim 1, wherein the method is performed on both of a pair of nodes, and wherein further the secret values generated at both of the nodes are symmetric.

3. (Original) A method according to Claim 2, wherein the generating a secret value includes performing a Diffie-Hellman computation.

4. (Original) A method according to Claim 1, further comprising:
retaining the secret value locally;
protecting the secret value using the public value received from the other node;
and

transmitting the protected secret value to the other node via the out-of-band mechanism.

5. (Original) A method according to Claim 4, wherein the generating a secret value includes performing a Rivest-Shamir-Adleman (RSA) computation.

6. (Canceled).

7. (Original) A method according to Claim 1, wherein the receiving of the public value from the other node via an out-of-band mechanism includes downloading the public value from an external device.

8. (Original) A method according to Claim 7, wherein the external device is any one of a personal digital assistant (PDA), flash memory, memory stick, barcode, smart card, USB-compatible device, Bluetooth-compatible device, and infrared-compatible device.

9. **(Currently Amended)** A computer-readable storage medium having one or more instructions causing one or more processors to:

~~load an operating system on a processor, wherein a profile of the operating system is stored on another processor;~~

generate a local two-part code having a public code component and a private code component:

in response to an attempt to allow [[the]] a processor to remotely load [[the]] an operating system by a client node from [[the]] another processor, wherein a profile of the operating system is stored on the another processor; or

simultaneously with a generation of the two-part code by a server node;

load the operating system on the processor;

store the public component on a peripheral out-of-band device which is then transported over an out-of-band mechanism to the another processor for configuration of a secure association and not authentication, wherein a low level of trust is required for transport as a trust relationship required between the processor and the another processor is established by using a third party out-of-band entity;

receive the public code component asynchronously from another processor via the peripheral device; [[and]]

generate a secret value using the local private code component and the public code component received from the other processor[.];

produce the secret value as a function of a local private value; and

share the secret value by encrypting the secret value using an imported public key value, the public key value imported via the out-of-band mechanism.

10. (Previously Presented) A computer-readable storage medium according to Claim 9, wherein the one or more instructions are executed on the other processor, and

wherein further the secret value is symmetrical to the secret value generated on the other processor.

11. (Previously Presented) A computer-readable storage medium according to Claim 9, wherein the one or more instructions to generate a secret value includes one or more instructions to perform a Diffie-Hellman computation.

12. (Previously Presented) A computer-readable storage medium according to Claim 9, further comprising one or more instructions causing one or more processors to:
 encode the secret value using the public code component received from the other processor; and
 transmit the encoded secret value to the other processor via the peripheral device.

13. (Previously Presented) A computer-readable storage medium according to Claim 12, wherein the one or more instructions to generate a secret value includes one or more instructions to perform an RSA computation.

14. (Canceled).

15. (Previously Presented) A computer-readable storage medium according to Claim 9, wherein the one or more instructions to receive the public code component from the other processor via the peripheral device includes downloading the public code component from one of a personal digital assistant (PDA), flash memory, memory stick,

barcode, smart card, USB-compatible device, Bluetooth-compatible device, and infrared-compatible device.

16. **(Currently Amended)** An apparatus, comprising:

a computer-readable storage medium;

a key generator on a first node to generate a local public/private key pair based on:

in response to an attempt to remotely load an operating system by the first node, wherein a profile of the operating system is stored on a second node; or

simultaneously with a generation of the local public/private key pair on the second node;

a computer processor executing code to write the local public/private key pair to an out-of-band computer-readable storage medium to facilitate setup of a secure association and not for authentication, wherein the secure association allows the first node to remotely load an operating system having a profile stored on a second node;

a shared secret generator on the second node to receive the public key from the first node via the out-of-band computer-readable storage medium connection without requiring a high degree of trust between the first node and the second node as a trust relationship required between the first node and the second node is established by using a third party out-of-band entity; and

the shared secret generator to generate a shared secret using the local private key and the public key received from the first node, wherein the shared secret is generated in response to receiving the public key from the first node.

17. (Original) An apparatus according to Claim 16, wherein the shared secret is symmetrical to a shared secret generated on the other node using the local public key and a private key corresponding to the other node.

18. (Original) An apparatus according to Claim 16, wherein the other node is a server.

19. (Original) An apparatus according to Claim 16, wherein the shared secret generator is to generate a shared secret by performing a Diffie-Hellman computation.

20. (Original) An apparatus according to Claim 16, further comprising an encoder to encode the secret value using the public key received from the other node and to transmit the encoded secret value to the other node via the out-of-band connection.

21. (Original) An apparatus according to Claim 20, wherein the shared secret generator is to generate a shared secret by performing an RSA computation.

22. (Original) An apparatus according to Claim 16, wherein the out-of-band connection includes any one of a personal digital assistant (PDA), flash memory, memory

stick, barcode, smart card, USB-compatible device, Bluetooth-compatible device, and infrared-compatible device.

23. **(Currently Amended)** A method implemented on a computing device having instructions executable by a processor for running a protocol for establishing a trust relationship between two or more processing nodes, the method comprising:

generating a public key and a private key based at least in part:

on each of at least two nodes in response to an attempt of allowing a first node of at least two nodes to remotely load an operating system, wherein a profile of the operating system is stored on a second node of at least two nodes; or

simultaneously with a generation of the public key and the private key on the second node;

exchanging the public keys asynchronously between the at least two nodes using an out-of-band mechanism comprising a computer-readable storage medium wherein the public keys are not used for authentication and without requiring a high degree of trust for an exchange of the public keys between the two nodes as a trust relationship required between the first node and the second node is established by using a third party out-of-band entity; and

calculating a secret to be shared on at least one of the two nodes.

24. (Previously Presented) A method for running a protocol according to Claim 23, wherein the calculating of the secret to be shared includes performing a function using the public key from the other of the two nodes and the private key.

25. (Previously Presented) A method for running a protocol according to Claim 24, wherein the calculating the secret to be shared includes performing a Diffie-Hellman calculation.

26. (Previously Presented) A method for running a protocol according to Claim 24, wherein the secret to be shared is symmetrical on the at least two nodes.

27. (Previously Presented) A method for running a protocol according to Claim 23, further comprising:

encoding the secret to be shared using the public key from the other of the two nodes; and

transmitting the encoded secret to be shared to the other of the two nodes via the out-of-band mechanism.

28. (Previously Presented) A method for running a protocol according to Claim 27, wherein the calculating the secret to be shared includes performing an RSA calculation.

29. (Previously Presented) A method for running a protocol according to Claim 23, wherein the out-of-band mechanism includes any one of a personal digital assistant (PDA), flash memory, memory stick, barcode, smart card, USB-compatible device, Bluetooth-compatible device, and infrared-compatible device.

30. **(Currently Amended)** An apparatus, comprising:
means for generating a local public/private key pair based at least in part on:
in response to an attempt to allow a node to remotely load an
operating system through a secure association with another node, wherein
a profile of the operating system is stored on the another node; or
simultaneously with a generation of the local public/private key
pair on the another node;
means for storing a public key on an out-of-band computer-readable storage
medium;
means for transporting asynchronously the public key to the another node;
means for receiving at the another node the public key from the out-of-band
computer-readable storage medium wherein the public key is used for configuration of
the secure association and not used for authentication; and
means for generating a shared secret using the local private key and another
public key received from the another node asynchronously via the out-of-band computer-
readable storage medium, wherein the another public key is generated by the another
node with a private value generated by the another node in response to receiving the
public key from the node.

31. (Original) An apparatus according to Claim 30, wherein the means for generating a shared secret performs a Diffie-Hellman computation.

32. (Original) An apparatus according to Claim 30, further comprising means for encoding the shared secret using the public key received from the other node.

33. (Original) An apparatus according to Claim 32, wherein the means for generating a shared secret performs an RSA computation.

34. (Previously Presented) An apparatus according to Claim 30, wherein the out-of-band computer-readable storage medium includes any one of a personal digital assistant (PDA), flash memory, memory stick, barcode, smart card, USB-compatible device, Bluetooth-compatible device, and infrared-compatible device.